

be medical superintendents who sometimes are not sufficiently tactful in carrying out some of their duties, just as there may be consultants who are sometimes forgetful of their hospital commitments. Similarly, examples could be quoted of doctors in any branch of medicine who sometimes interpret their duties inadequately; and cases could be stated, equally easily and fallaciously, to indicate that any particular system is essentially wrong. But all these matters call for adjustment in the individual, and isolated incidents cannot be the basis of a sound judgment.

There is no difficulty with regard to the formation of medical staff meetings in municipal hospitals so far as medical superintendents are concerned, for they are in favour of such a step. Senior staff have complete freedom of clinical action, but useful decisions could be taken at such meetings, and they would help to give consulting staff a closer interest and a more integral part in these hospitals with mutual benefit.

Both municipal and voluntary hospitals have their own advantages and disadvantages. Both exist solely for the care of the sick, and in their individual approach to the problem it is probable that neither has an all-round view, and each can learn something from the other. Voluntary hospitals have performed an inestimable service to the community, sometimes inadequately appreciated, but the rise of an alternative service has shown up certain points, arising from the fact that they have too much work to do. The enormous growth and improvement of municipal hospitals in the last twelve years and the confidence shown in them by practitioners and the public could hardly have been achieved if there were something radically wrong with their internal hospital medical arrangements.

The voluntary hospital system is an old and venerable tree that has borne much good fruit, but after so many years it is natural that there is some dead wood to cut away. In place of this should be grafted some of the vigorous growth of the new system, and together they will form a structure of unequalled service to the community.—I am, etc.,

Derby.

R. G. COOKE.

SIR,—Dr. Geoffrey Bourne (April 17, p. 490) asks me three specific questions, to which I gladly reply.

1. I do believe in democracy in science as in everything else—that is, in real, unrestricted freedom of speech and criticism.

2. I do not believe in placing autocratic power as regards medical affairs in the hands of any individual, be he medical superintendent or anyone else. Dr. Bourne in the letter just referred to states: "In plain fact the medical superintendent in council and municipal hospitals has absolute power as regards medical affairs as well as administratively." I can find no evidence for this statement. Rule 391 of the Hospitals and Medical Services Committee of the L.C.C. deals with the duties of a medical superintendent. It has twenty-eight sections, and the only one that could possibly be construed in the way Dr. Bourne suggests is Section VI, which reads as follows: "Organize and supervise the work of the medical staff of the hospital and be responsible for the due and punctual attendance upon the patients and for the giving of the requisite directions as to their treatment, nursing, and diet by the medical officers, and for the condition of the wards." It is difficult to understand how Dr. Bourne can say that this gives to the medical superintendent "absolute power as regards medical affairs as well as administratively." Rightly or wrongly it has been our traditional method to evolve from one system to a better by gradual steps and stages. In a sense, therefore, the master of a Poor-Law workhouse may be looked upon as the remote ancestor of the medical superintendent of a council hospital. But the absolute power of the medical superintendent is gone, although he is still administratively in charge of the institution.

3. I believe that medical committees should be instituted in every hospital, and that they should have local freedom to elect their own chairmen and officers, and that machinery should be devised, where it does not already exist, so that these committees may convey their opinions directly to the body in control of the hospitals in which they work.

Dr. Bourne goes on to say, referring to myself: "If his official position makes it impossible for him to reply, I suggest that he ascertains the answers from his lay authority with their permission to make them public." Whether this foolish remark

arises from ignorance or prejudice I do not know. I am a member of the honorary staff of a voluntary hospital and a part-time surgeon under the E.M.S. scheme. I have criticized the voluntary hospitals and the E.M.S. scheme freely without let or hindrance and shall continue to do so if necessary. I am also a member of the L.C.C. and chairman of its Hospitals and Medical Services Committee. The L.C.C. is a democratic organization, every member of which is free to express his views, although, obviously, where decisions have to be made it is the view of the majority that prevails. I do not know to which of these three "lay authorities" (or any other) Dr. Bourne refers.—I am, etc.,

Northwood.

SOMERVILLE HASTINGS.

A National Medical Service

SIR,—We do not deny that the present medical services are far from perfect, and no member of the profession would impede any alterations calculated to achieve the maximum possible efficiency. It is the stated policy of the present Government (elected in 1935) to institute a unified medical service; but approximately one-seventh of the total population of these islands, selected by medical boards from a selected age group, require the attentions (under a unified medical service) of about a quarter of the total profession (*Lancet*, April 10, 1943, p. 469). The success of any medical service must depend on the active and willing co-operation both of the lay public and of the profession. But at present the most virile section of the public (lay and professional) is disfranchised, and has not been, nor can be effectively, consulted in wartime.

We suggest, therefore, that the present time is inappropriate for the Government to foist a new medical service upon a public, unsuspecting, and gagged by the bureaucratic restrictions necessary to the successful conclusion of the war.—We are, etc.,

DOUGLAS ROBERTSON.

G. O. RICHARDSON.

G. A. SMART.

Kenny Treatment of Poliomyelitis

SIR,—My attention has been drawn to the leading article in the *Journal* of Nov. 28, 1942 (p. 639), entitled, "Kenny Treatment of Poliomyelitis." In reference to this matter I consider it necessary to correct certain statements contained in this article.

In the first instance my contribution to medicine is not a reformed treatment for recognized symptoms but a new concept of the symptoms. With regard to this I would refer you to the bulletin read at the staff meeting of the Mayo Clinic, Aug. 12, 1942, and presented by Dr. Frank Krusen, professor of physical therapy, Mayo Clinic, Rochester. Dr. Krusen admits that when he heard my theory with regard to these symptoms he thought I was unbalanced, but when I invited him to come to Minneapolis and see for himself he, with the heart and mind of the true physician, readily accepted the invitation, and, subsequently, requested to be enrolled in the first physicians' class to be held under the auspices of the Department of Physical Therapy and Orthopaedic Surgery, School of Medicine, University of Minnesota, during which time the concept was presented to him and the treatment for this new concept demonstrated and the results shown. Dr. Krusen's report reads: "Her ideas are original and she should be given full credit for having developed a new and extremely interesting concept of the symptoms of early poliomyelitis and the proper management of these symptoms. The Kenny method merits the close scrutiny of every physician."

Your article makes reference to the main points of my treatment in the acute stage. I would respectfully draw your attention to the fact that patients were not admitted to Queen Mary's Hospital in the acute stage. The patients treated in this institution were transferred from the infectious diseases hospital after the acute stage was over, and in a great many instances were not admitted to Wards A7 and 8, where the work was being carried out, but were hospitalized in E3 and 4 until the London County Council inquired of the parents if they were willing that their child should be submitted to the new type of treatment. This took quite a while. The parents generally waited to consult the parents of the children who were already receiving treatment, after which they would give their consent. By this time in quite a number of the cases the early symptoms had accomplished their deadly work. I attempted to explain this to the committee, and also that spasm was a damaging feature, but the committee were non-receptive. The reply I received was, "Spasm? What do you mean? This is a new one on us." This remark was passed by Mr. Fairbanks, and nothing further materialized. This committee was formed in Nov., 1937, during my absence in Australia.

I returned to England in April, 1938, and met the committee twice—in April, 1938, and May, 1938. The report referred to was presented in June, 1938. I left Queen Mary's Hospital the following month and returned to Australia. The conferences held at Queen Mary's Hospital by the committee during the two afternoons of their visit in April and May and their final conference in June, before the presentation of their report, were held *in camera*. I was not invited to be present.

I would also like to state that you are mistaken if you think that I was well pleased with my reception by the L.C.C. I was well pleased with the earnest endeavours of the technicians to grasp the technique taught them, which prevented deformities despite the abandonment of the paramount principle of orthodox procedures—immobilization. I was bitterly disappointed at the refusal of the L.C.C. to allow the Kodak Company to reproduce the film picture of my work at Carshalton, for which I myself was willing to pay in order that I might take it back to Australia. Sir Earle Page, Minister of Health of the Commonwealth of Australia, had made the request to me. I also noticed that you make reference to a report submitted by Dr. Starr, given to the Minister of Health, New South Wales. I think it is well known that I had dissociated myself from this work with Dr. Starr long before this report was published.

I notice that you have made no mention of the report submitted by Drs. Forster and Price of Melbourne, Australia, in which they state: "(1) Miss Kenny lays great stress on the condition of muscle spasm, its prevention and cure. We think her views on this subject require careful consideration. (2) Stiffness is a troublesome feature in the cases treated by the orthodox methods and entirely absent in the cases treated under Miss Kenny's supervision. The reason why should be earnestly sought. (3) Expected deformities from muscle imbalance did not occur, but did occur in our own splinted patients we ourselves treated or received from other surgeons. This calls for comment."

You also quote: "In December, 1941, the *Journal of the American Medical Association* made this cautious statement: 'Adoption of the Kenny technique represents an elaboration of well-recognized principles,' and, 'If there is any revolutionary element it consists in its abandonment of early rigid splinting and the adoption of continuous and meticulous hydrotherapy and physical therapy to maintain the function of muscles, at the same time producing increased comfort to the patient.'" This statement appeared (like your own) in the editorial, and was presented by one whom I had never met or at that time seen. You omitted to quote the statement made in the issue of this journal for June 7, presented by the professors of physical therapy and orthopaedic surgery, University of Minnesota, who had observed the work and made their report from observation, reading: "According to this concept the cardinal symptoms of infantile paralysis are to use her terms muscle spasm, muscle incoordination, and mental alienation. This is opposed to the usual concept, where the cardinal symptom is flaccid paralysis without muscle spasm or incoordination. The presence of spasm has been demonstrated in 100% of the cases." This report further refers to this matter and states the concept is original and unconventional.

You also state: "In the textbooks it is recognized that in poliomyelitis there is gross disorganization of muscular function with overaction (which is another way of saying spasm) of unparalysed muscles." Again, "That mental alienation is no new idea is well shown by the following sentences from Jones and Lovett: 'Muscle training is fundamentally an attempt to restore a cerebral motor impulse to a muscle, an impulse which has been either impaired or lost during the acute stage of poliomyelitis.'" It is made clear in this presentation that the writer of this article is not familiar with the Kenny concept. He or she refers to overaction of unparalysed muscles. These are in orthodox supposed to be normal muscles contracting and pulling the skeleton into deformity. These muscles are in reality the sick muscles, not the non-paralysed one. They are the muscles that require careful nursing. The pain, spasm, and shortening causing the deformities are centred in these muscles, and the alienation of the opponents is caused through this condition, not as stated by the writer in his paper.

The writer further states in reference to Lovett and Jones: "They knew all about incoordination, overaction or spasm of muscles, cerebral impulses, and the scrupulous care required for their protection and re-education." The presentation of the muscle condition as accepted by Lovett and Jones is reproduced in *Public Health Bulletin*, No. 242, U.S.A. Public Health Headquarters, by the pupils of Dr. Lovett, and reads: "The muscle itself is never affected by the disease but is comparable to an automobile with its battery stolen. The muscle is loose and flaccid and hangs like a hammock between its points of origin and insertion." This is the Lovett-Jones concept for which splinting was applied to prevent the strong supposedly normal muscles from pulling the weak, flaccid muscles. Nurses were warned that to leave a splint off the part and the supposedly flaccid muscles unsupported even for a short time would mean prolonging treatments for months.

These supposedly flaccid and paralysed muscles were the muscles referred to in the report of Dr. Alfred Deacon, orthopaedic surgeon, Children's Hospital, Winnipeg, Canada, which appeared in the

Canadian Public Health Journal, August, 1941, reading: "We were astounded to see Miss Kenny restore what we had recorded as completely flaccid and paralysed muscles to full function in the course of a few minutes by restoring mental awareness." This was not done by directing the patient's mind to the part. The motor pattern had to be restored first. The patient is not asked to think. If they could think there would be no necessity to tell them to do so. The procedure reaches further than that. The concept can be best explained in the language of the scientist and research worker, Dr. Hipps, who wrote: "You have found symptoms and visible findings in this disease, infantile paralysis, that we had no idea existed. You have demonstrated to me a disease I did not know existed."

You are very much mistaken if you think the American workers are giving extravagant credit to this presentation or that it is old ideas with new names. There have been upward of 300 doctors attending the classes at the University of Minnesota, all of whom have practising technicians also trained in Minneapolis from the United States of America, Cuba, and Canada. Many have film pictures of the results and that of their orthodox patients, showing 60% more recoveries in the patients treated by the method evolved for the new concept, which has been acknowledged by the observers to be diametrically opposed to the orthodox concept.

The author of the article in your *Journal* refers to Jones and Lovett as the orthodox authorities on this disease. The two physicians referred to in this letter—Drs. Krusen, Mayo Clinic, and Pohl, Minneapolis—were trained in this school, and upon my arrival in Minnesota, U.S.A., were religiously practising their technique. Both thought I was unbalanced mentally when I presented my concept, and both, being true physicians, now acknowledge their mistake. The investigation of my work and theories was carried out at the suggestion and under the direction of Dr. Wallace Cole, professor of orthopaedic surgery, University of Minnesota, and was assisted by Dr. Miland Knapp, professor of physical therapy. I would gladly welcome the author of your article to Minneapolis as representative in the interests of humanity and the well-being of the people of England. I think this would be a laudable undertaking.

I have requested the Bruce Publishing Company to forward to you the book entitled: *The Kenny Concept of Infantile Paralysis and its Treatment*. You will see in the foreword, written by Dr. Frank Ober, professor of orthopaedic surgery, Harvard University, and president of the American Orthopedic Association, that: "Sister Kenny puts great emphasis on muscle spasm in the affected muscles. One does not find mention of muscle spasm in textbooks, but there is no doubt that it is present, and is a great factor in the production of early deformities unless relieved. Mental alienation of muscles is another term used in the book, and does occur even in other conditions in which there is no paralysis." Dr. Ober was a colleague and pupil of the Jones and Lovett you refer to. This evidence, presented from indisputable authority, will go far to explain the reason why deformities did not occur in the patients treated by this method under my supervision at Queen Mary's Hospital, Carshalton, and every other institution that adheres to the method when immobilization, the paramount principle of orthodox procedures, to prevent this condition was abandoned.

You will learn from the above observation and statement that my concept is not a new term for old ideas. It is the muscle affected that is in spasm and the non-affected one that is alienated. Therefore, the explanation given by Drs. Cole and Knapp two years ago is supported to-day by Dr. Frank Ober and the hundreds of others that have come to listen and learn. It is explained in the presentation of Dr. Frank Krusen, Mayo Clinic, Rochester, and already quoted in this letter. I would gladly welcome a doctor and technician from Queen Mary's Hospital to finish their training, also from any of the Australian clinics that are equipped with a partially trained staff. Units are being enrolled from the South American Republics, Cuba, Canada, and China. The University of Minnesota would gladly share this message of healing with the rest of the world.—I am, etc.,

Minneapolis.

ELIZABETH KENNY.

Staffing of Miniature Mass Radiography Units

SIR,—With reference to Dr. Norman Henderson's letter (April 17, p. 488), reduction in radiographic exposure time when employing mobile power unit is due to a variety of reasons. A specific input voltage at a high frequency permits precise calculation of iron and copper, and, more particularly, allows reduction of core and windings in the design and construction of the high-tension x-ray transformer. Portability of transformer, therefore, is the logical reason I have specified, in certain instances, a high cycle input in self-contained mobile x-ray units (*Brit. J. Radiol.*, 1934, 7, No. 79).

I would not advocate the adoption of non-standard frequency in any contemplated wide use of mobile miniature radiographic units. Standardization must be preserved throughout the scheme whether the apparatus be used on the public supply mains or